UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|---|-------------|----------------------|---------------------|------------------|--|
| 10/788,471  | 03/01/2004  | Ulrich Sinn          | Q79183              | 7558             |  |
| 23373 7590 11/13/2007<br>SUGHRUE MION, PLLC<br>2100 PENNSYLVANIA AVENUE, N.W. |             |                      | EXAMINER            |                  |  |
|   |             |                      | HUANG, WEN WU       |                  |  |
| SUITE 800<br>WASHINGTON, DC 20037   |             |                      | ART UNIT            | PAPER NUMBER     |  |
| WASHINGIC   | N, DC 20037 |                      | 2618                |                  |  |
|   |             |                      |                     |                  |  |
|   |             |                      | MAIL DATE           | DELIVERY MODE    |  |
|   |             |                      | 11/13/2007          | PAPER            |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Advisory Action Before the Filing of an Appeal Brief

| Application No. | Applicant(s) |  |
|-----------------|--------------|--|
| 10/788,471      | SINN, ULRICH |  |
| Examiner .      | Art Unit     |  |
| Wen W. Huang    | 2618         |  |

|  | Wen W. Huang  | 2618  |   |  |  |  |  |
|--|---|---|---|--|--|--|--|
| The MAILING DATE of this communication appe  | ars on the cover sheet with the c   | orrespondence add   | ress  |  |  |  |  |
| THE REPLY FILED 12 October 2007 FAILS TO PLACE THIS A  | APPLICATION IN CONDITION FOR  | R ALLOWANCE.  |   |  |  |  |  |
| 1.  The reply was filed after a final rejection, but prior to or on this application, applicant must timely file one of the follow places the application in condition for allowance; (2) a No a Request for Continued Examination (RCE) in compliance time periods:   | the same day as filing a Notice of<br>ving replies: (1) an amendment, aff<br>tice of Appeal (with appeal fee) in o<br>ce with 37 CFR 1.114. The reply mu  | Appeal. To avoid aba<br>idavit, or other evider<br>compliance with 37 C                                       | rce, which<br>FR 41.31; or (3)                              |  |  |  |  |
| a) The period for reply expires <u>3</u> months from the mailing date of the final rejection.  |   |   |   |  |  |  |  |
| b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN  |   |   |   |  |  |  |  |
| TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).  Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee   |   |   |   |  |  |  |  |
| Extensions of time may be obtained under 37 CFR 1.136(a). The date have been filed is the date for purposes of determining the period of exunder 37 CFR 1.17(a) is calculated from: (1) the expiration date of the set forth in (b) above, if checked. Any reply received by the Office later may reduce any earned patent term adjustment. See 37 CFR 1.704(b) NOTICE OF APPEAL   | tension and the corresponding amount<br>shortened statutory period for reply orig<br>r than three months after the mailing da   | of the fee. The appropr<br>inally set in the final Offi   | iate extension fee<br>ce action; or (2) as                  |  |  |  |  |
| 2. The Notice of Appeal was filed on A brief in comp   | pliance with 37 CFR 41 37 must be   | filed within two month  | s of the date of  |  |  |  |  |
| filing the Notice of Appeal (37 CFR 41.37(a)), or any exte a Notice of Appeal has been filed, any reply must be filed  | nsion thereof (37 CFR 41.37(e)), to   | avoid dismissal of th   | e appeal. Since   |  |  |  |  |
| AMENDMENTS   |   |   |   |  |  |  |  |
| The proposed amendment(s) filed after a final rejection,  (a) They raise new issues that would require further co  (b) They raise the issue of new matter (see NOTE belo  (c) They are not deemed to place the application in be appeal; and/or  (d) They present additional claims without canceling a  NOTE: (See 37 CFR 1.116 and 41.33(a)).  4. The amendments are not in compliance with 37 CFR 1.1  5. Applicant's reply has overcome the following rejection(s)  6. Newly proposed or amended claim(s) would be a non-allowable claim(s).  7. For purposes of appeal, the proposed amendment(s): a) how the new or amended claims would be rejected is pro The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: Claim(s) withdrawn from consideration:  AFFIDAVIT OR OTHER EVIDENCE  8. The affidavit or other evidence filed after a final action, but | nsideration and/or search (see NO ow);  Itter form for appeal by materially recorresponding number of finally recorresponding number of filling a Notation and the filling a Notation number of filling | TE below); ducing or simplifying ected claims. empliant Amendment timely filed amendme II be entered and an e | the issues for (PTOL-324). ent canceling the explanation of |  |  |  |  |
| because applicant failed to provide a showing of good an was not earlier presented. See 37 CFR 1.116(e).  9.  The affidavit or other evidence filed after the date of filing   | a Notice of Appeal, but prior to the  | e date of filing a brief,   | will <u>not</u> be  |  |  |  |  |
| entered because the affidavit or other evidence failed to showing a good and sufficient reasons why it is necessar 10.  The affidavit or other evidence is entered. An explanation   | y and was not earlier presented. S  | See 37 CFR 41.33(d)(  | 1).   |  |  |  |  |
| REQUEST FOR RECONSIDERATION/OTHER  | of the states of the stands after e   | y io ocioni oi allaoi   |   |  |  |  |  |
| <ol> <li>The request for reconsideration has been considered by<br/>see attachment.</li> </ol>   |   | n condition for allowa  | nce because:  |  |  |  |  |
| 12. Note the attached Information Disclosure Statement(s).   | (PTO/SB/08) Paper No(s)   |   |   |  |  |  |  |
| 13.  Other:  |   |   |   |  |  |  |  |
|  |   |   |   |  |  |  |  |
|  |   |   |   |  |  |  |  |
|  |   |   |   |  |  |  |  |

Art Unit: 2618

#### **ADVISORY ACTION**

Claims 1-15 are pending.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 1. Claims 1-4, 9-12, 14 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Litwin, Jr. et al. (US. 7,073,083 B2; hereinafter "Litwin")

Regarding **claim 1**, Litwin teaches a method for transmitting information data between a mobile radio transmitter and a radio receiver of a machine or plant (see Litwin, fig. 1, devices 102), comprising:

providing a first radio link between the radio transmitter and the radio receiver for transmitting safety related information data (see Litwin, fig. 1, auxiliary channel 108, col.

2, lines 13-14 and col. 3, line 26, wireless modem); and

providing a second radio link between the radio transmitter and the radio receiver for transmitting non-safety related information data (see Litwin, fig. 1, data channel 106, col. 2, lines 11-12),

Art Unit: 2618

wherein the first radio link and the second radio link are two physical channels that contemporaneously transmit the information data in parallel (see Litwin, fig. 1, auxiliary channel and data channel, col. 2, lines 46-47 and 55-60; col. 5, lines 46-51).

Regarding **claim 2**, Litwin also teaches the method as claimed in claim 1, wherein the first and the second radio link are set up and operated concurrently (see Litwin, col. 2, lines 57-60).

Regarding **claim 3**, Litwin also teaches the method as claimed in claim 1, wherein the first radio link is operated with a maximum packet life (see Litwin, col. 3, lines 28-40).

Regarding **claim 4**, Litwin also teaches the method as claimed in claim 3, wherein the first radio link is operated synchronously with a maximum packet life (see Litwin, col. 3, lines 28-40).

Regarding **claim 9**, Litwin also teaches the method as claimed in claim 1, wherein the first and the second radio links are set up via a single radio system (see Litwin, col. 2, lines 58-60, common physical medium).

itio; italiibei. 10/700,4

Art Unit: 2618

Regarding **claim 10**, Litwin also teaches the method as claimed in claim 1, wherein safety related information is transmitted via a SCO link of a radio system using a Bluetooth standard (see Litwin, col. 3, lines 28-40).

Regarding **claim 11**, Litwin also teaches the method as claimed in claim 1, wherein non-safety related information is transmitted via an ACL link of a radio system using a Bluetooth standard (see Litwin, col. 4, lines 1-13).

Regarding **claim 12**, Litwin also teaches the method as claimed in claim 11, wherein non-safety related information is transmitted via the ACL link of a radio system using the Bluetooth standard (see Litwin, col. 4, lines 1-13).

Regarding **claim 14**, Litwin teaches a radio transmitter configured to transmit data to a radio receiver (see Litwin, fig. 1, devices 102) of a machine or plant, comprising:

a first radio link for transmitting safety related information data (see Litwin, fig. 1, auxiliary channel 108, col. 2, lines 13-14 and col. 3, line 26, wireless modem); and a second radio link for transmitting non-safety related information data (see Litwin, fig. 1, data channel 106, col. 2, lines 11-12),

wherein the first radio link and the second radio link are two physical channels that contemporaneously transmit the information data in parallel (see Litwin, fig. 1, auxiliary channel and data channel, col. 2, lines 46-47 and 55-60; col. 5, lines 46-51).

data channel 106, col. 2, lines 11-12),

Art Unit: 2618

Regarding **claim 15**, Litwin teaches a radio receiver of a machine or plant, configured to receive data from a radio transmitter (see Litwin, fig. 1, devices 102), comprising:

a first radio link for receiving safety related information data (see Litwin, fig. 1, auxiliary channel 108, col. 2, lines 13-14 and col. 3, line 26, wireless modem); and a second radio link for receiving non-safety related information (see Litwin, fig. 1,

wherein the first radio link and the second radio link are two physical channels that contemporaneously transmit the information data in parallel (see Litwin, fig. 1, auxiliary channel and data channel, col. 2, lines 46-47 and 55-60; col. 5, lines 46-51).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Litwin as applied to claim 1 above, and further in view of Kraus et al. (US. 6,893,395 B1; hereinafter "Kraus")

Regarding claim 5. Litwin teaches the method as claimed in claim 1.

Art Unit: 2618

Litwin is silent to teaching that further comprising using the first radio link to transmit duplicates of the safety related information. However, the claimed limitation is well known in the art as evidenced by Kraus.

In the same field of endeavor, Kraus teaches a method comprising using the first radio link to transmit duplicates of the safety related information (see Kraus, col. 4, lines 1-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Litwin with the teaching of Kraus in order to increase the reliability of the transmission of the emergency/safety related information (see Kraus, col. 2, lines 53-55).

Regarding **claim 6**, the combination of Litwin and Kraus also teaches the method as claimed in claim 5, wherein a predefined number of the duplicates is transmitted (see Kraus, col. 4, lines 9-12).

Regarding **claim 7**, the combination of Litwin and Kraus also teaches the method as claimed in claim 5, wherein the duplicates of the safety related information are transmitted until new safety related information is available (see Kraus, col. 3, lines 46-56).

Regarding **claim 8**, the combination of Litwin and Kraus also teaches the method as claimed in claim 5, wherein the duplicates of the safety related information are

Art Unit: 2618

transmitted until the transmitted information has been correctly received (see Kraus, col. 2, lines 48-56).

- 3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Litwin as applied to claim 12 above, and further in view of Menard (US. 7,103,344 B2; hereinafter "Menard")
  - Regarding claim 13, Litwin also teaches the method as claimed in claim 12.

Litwin is silent to teaching that wherein information is transmitted via a single radio system using the Bluetooth standard. However, the claimed limitation is well known in the art as evidenced by Menard.

In the same field of endeavor, Menard teaches that wherein information is transmitted via a single radio system using the Bluetooth standard (see Menard, col. 6, lines 14-29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Litwin with the teaching of Menard in order to allow sufficient range to conduct communications (see Menard, col. 7, lines 6-10).

## Response to Arguments

Applicant's arguments filed 10/12/07 have been fully considered but they are not persuasive.

Art Unit: 2618

In response to Applicant's argument that the emergency shutdown signal transmitted via auxiliary channel is not information data, the Examiner respectfully disagrees.

More specifically, the Examiner submits that Litwin explicitly teaches that the emergency shutdown signal may contain a network address of the identified device and a command for the identified device to perform an emergency shutdown (see Litwin, col. 3, lines 55-57).

Thus, the Examiner submits that the emergency shutdown signal of Litwin reads on the safety related information data.

Furthermore, the Applicant argues that Litwin is silent to teaching transmitting data in parallel contemporaneously. However, the Examiner respectfully disagrees.

More specifically, Litwin teaches two parallel channels, data channel 106 for transmitting non-safety data and auxiliary channel 108 for transmitting safety data. Moreover, Litwin fig. 3 teaches the malfunctioning slave device transmitting data via data channel 106 while the master device transmitting emergency shutdown data via auxiliary channel 108 (see Litwin, col. 5, lines 40-45 and 48-51).

Thus, the Examiner submits that Litwin teaches transmitting data in parallel contemporaneously.

Art Unit: 2618

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Wen W. Huang whose telephone number is (571) 272-

7852. The examiner can normally be reached on 10am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Matthew D. Anderson can be reached on (571) 272-4177. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

wwh

11/06/07

MATTHEW ANDERSON SUPERVISORY PATENT EXAMINER

Page 9